Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A multicarrier communication line characterization system comprising:

a data postprocessing module; and

a data interpretation module, wherein raw data received from one or more modems via a data collection module is used to determine the characteristics of a communications link.

2. (Original) The system of claim 1, wherein the data processing module performs at least one of a calibration, a filter compensation, a determination of the SNR Medley from a bits and gains table and a data rate conversion.

3. (Original) .The system of claim 1, wherein the data interpretation module performs at least one a loop characterization, a interferer detection, a data reduction estimation and a data rate estimation.

4. (Original) The system of claim 1, wherein the communications link is a portion of at least one of a digital subscriber line communications system, a discrete multi-tone communications system or discrete wavelet multi-tone communications system, and the multicarrier communications line characterization system outputs visually

displayable data about the communications link based on data obtained from one or more of a CO or CPE modem.

Claims 5-28 (Cancelled)

29. (Original) A method of characterizing a multicarrier communications link comprising:

  postprocessing data received from one or more of a CO and a CPE modem; and

  interpreting the data to determine the characteristics of the communications link.

30. (Original) The method of claim 29, wherein the postprocessing comprises at least one of a calibration, a filter compensation, a determination of the SNR Medley from a bits and gains table and a data rate conversion.

31. (Original) The method of claim 29, wherein the data interpretation comprises at least one of a loop characterization, a interferer detection, a data reduction estimation and a data rate estimation.

32. (Original) The method of claim 29, wherein the communications link is a portion of at least one of a digital subscriber line communications system, a discrete multi-tone communications system or discrete wavelet multi-tone communications system, and wherein visually displayable data about the communications link based on data obtained from one or more of the CO or the CPE modem is output.

Claims 33-56 (Cancelled)

57. (Original) An information storage media comprising information for characterizing a multicarrier communications link comprising:

information that postprocesses data received from one or more of a CO and a CPE modem; and

information that interprets the data to determine the characteristics of the communications link.

58. (New) A communication line characterization system comprising:

a data interpretation module designed to receive raw measurement data from a remotely located multicarrier modem having an embedded data collection module, the data interpretation module designed to interpret the raw measurement data received from the data collection module to determine characteristics of a communication line.

59. (New) The system of claim 58, wherein the data interpretation module performs at least one of a loop characterization, an interferer detection, a data reduction estimation and a data rate estimation.

60. (New) The system of claim 58, wherein the raw measurement data comprises at least a measurement of idle channel noise (ICN).

61. (New) The system of claim 60, wherein the interpretation module determines the estimated data rate of the telephone line based on the ICN.

62. (New) A communication line characterization system comprising:

a modem having a data collection module designed to collect raw measurement data; and

a remotely located data interpretation module designed to receive raw measurement data from the data collection module, the data interpretation module designed to interpret the raw measurement data received from the data collection module to determine characteristics of a communication line.

63. (New) The system of claim 62, wherein the data interpretation module performs at least one of a loop characterization, an interferer detection, a data reduction estimation and a data rate estimation.

64. (New) The system of claim 62, wherein the raw measurement data comprises at least a measurement of idle channel noise (ICN).

65. (New) The system of claim 64, wherein the interpretation module determines the estimated data rate of the telephone line based on the ICN.

66. (New) A communication line characterization method comprising:

receiving raw measurement data from a remotely located multicarrier modem having an embedded data collection module; and

interpreting the raw measurement data received from the data collection module to determine characteristics of a communication line.

67. (New) The method of claim 66, further comprising performing at least one of loop characterization, interferer detection, data reduction estimation and data rate estimation.

68. (New) The method of claim 66, wherein the raw measurement data comprises at least a measurement of idle channel noise (ICN).

69. (New) The method of claim 68, further comprising determining the estimated data rate of the communication line based on the ICN.

70. (New) A communication line characterization method comprising:

collecting raw measurement data in a multicarrier modem;

receiving the raw measurement data from the modem; and

interpreting the raw measurement data to determine characteristics of a communication line.

71. (New) The method of claim 70, further comprising performing at least one of loop characterization, interferer detection, data reduction estimation and data rate estimation.

72. (New) The method of claim 70, wherein the raw measurement data comprises at least a measurement of idle channel noise (ICN).

73. (New) The method of claim 72, further comprising determining the estimated data rate of the communication line based on the ICN.